

Title (en)

APPARATUS AND METHODS FOR REMEDIATING MATERIALS CONTAMINATED WITH HYDROCARBONS

Publication

EP 0543530 A3 19931013 (EN)

Application

EP 92310068 A 19921103

Priority

US 79227991 A 19911118

Abstract (en)

[origin: EP0543530A2] The remediation apparatus includes a pair of heating units, e.g., rotary drum dryers, each having a contaminated material inlet and a burner at opposite ends whereby the contaminated material and hot gases of combustion are in heat exchange, preferably counterflow relation. Material-bearing hydrocarbon contaminants are heated in the first drum to volatilize the low boiling fraction. The soil is conveyed to the second drum and heated to a higher temperature to volatilize the intermediate and high boiling fractions. The volatilized contaminants from the second drum are returned to the burner of the first drum for at least partial oxidation and reduction of the higher fractions to lower fractions. The dust and gases exiting the first drum flow to a baghouse for separation into dust and volatilized contaminants. The dust is returned to the soil. The volatilized contaminants are further eliminated, e.g., by oxidation.

IPC 1-7

F23G 7/14; **B09B 3/00**

IPC 8 full level

B01D 53/72 (2006.01); **B09C 1/06** (2006.01); **F23G 7/14** (2006.01)

CPC (source: EP US)

B01D 53/72 (2013.01 - EP US); **B09C 1/06** (2013.01 - EP US); **F23G 7/14** (2013.01 - EP US)

Citation (search report)

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- [Y] WO 8904730 A1 19890601 - STILL OTTO GMBH [DE]
- [Y] US 4974528 A 19901204 - BARCELL ROBERT B [US]
- [Y] EP 0155022 A1 19850918 - ECOTECHNIEK BV [NL]
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Designated contracting state (EPC)

AT DE DK ES FR GB GR IT NL SE

DOCDB simple family (publication)

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